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Tyson A. Kamuf  
Mark W. Starnes  
Julia B. Hawes

April 26, 2006

**Via Federal Express**

Ms. Elizabeth O'Donnell  
Executive Director  
Public Service Commission  
211 Sower Boulevard, P.O. Box 615  
Frankfort, Kentucky 40602-0615

**RECEIVED**

APR 27 2006

PUBLIC SERVICE  
COMMISSION

Re: In the Matter of: Consideration of the Requirements  
of the Federal Energy Policy Act of 2005 Regarding  
Time-Based Metering, Demand Response, and  
Interconnection Service, Administrative Case No. 2006-00045

Dear Ms. O'Donnell:

Enclosed are an original and ten copies of the response of Big Rivers Electric Corporation, Kenergy Corp., Jackson Purchase Energy Corporation, and Meade County Rural Electric Cooperative Corporation to the First Request for Information of Metro Human Needs Alliance to All Jurisdictional Utilities in the above-styled matter. I certify that a copy of this filing has been served this day on the persons shown on the attached service list.

Sincerely yours,



Tyson Kamuf

TAK/ej  
Enclosures

cc: Service List

**SERVICE LIST**  
**PSC CASE NO. 2006-00045**

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**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

**CONSIDERATION OF THE REQUIREMENTS )  
OF THE FEDERAL ENERGY POLICY ACT OF )  
2005 REGARDING TIME-BASED METERING, )  
DEMAND RESPONSE, AND INTERCONNECTION )  
SERVICE )**

**CASE NO.  
2006-00045**

**RECEIVED**

**APR 27 2006**

**PUBLIC SERVICE  
COMMISSION**

**RESPONSE OF BIG RIVERS ELECTRIC CORPORATION,  
KENERGY CORP., JACKSON PURCHASE ENERGY  
CORPORATION, AND MEADE COUNTY RURAL ELECTRIC  
COOPERATIVE CORPORATION TO THE FIRST REQUEST  
FOR INFORMATION OF METRO HUMAN NEEDS ALLIANCE  
TO ALL JURISDICTIONAL UTILITIES**

**April 27, 2006**



RESPONSE OF BIG RIVERS ELECTRIC CORPORATION, KENERGY CORP.,  
JACKSON PURCHASE ENERGY CORPORATION, AND MEADE COUNTY  
RURAL ELECTRIC COOPERATIVE CORPORATION TO THE FIRST REQUEST  
FOR INFORMATION OF METRO HUMAN NEEDS ALLIANCE TO ALL  
JURISDICTIONAL UTILITIES

April 27, 2006

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4 **Item 1)** Under a critical peak pricing and real time pricing program, as described  
5 in the Commission's Order of February 24, 2006, how would you notify customers of  
6 pricing changes so that they could make adjustments in their usage?  
7

8 **Response)** Big Rivers Electric Corporation ("Big Rivers") and its three distribution  
9 cooperative members, Kenergy Corp. ("Kenergy"), Meade County Rural Electric  
10 Cooperative Corporation ("Meade County RECC"), and Jackson Purchase Energy  
11 Corporation ("JPEC") (collectively, the "Member Systems"), have not sufficiently  
12 studied a critical peak pricing or real time pricing program in order to broadly  
13 implement such a program. As explained in more detail in their respective responses  
14 to the Public Service Commission's ("Commission" or "PSC") initial data requests  
15 contained in the Commission's Order dated February 24, 2006, Big Rivers and its  
16 Member Systems have had no incentive to conduct such studies because of a lack of  
17 customer interest in such programs and because Big Rivers and its Member Systems'  
18 costs do not vary by time of day. Such studies would be necessary before it could be  
19 determined how best to notify customers of pricing changes under such programs.  
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22 **Witness: C. William Blackburn and Russ Pogue**  
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RESPONSE OF BIG RIVERS ELECTRIC CORPORATION, KENERGY CORP.,  
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RURAL ELECTRIC COOPERATIVE CORPORATION TO THE FIRST REQUEST  
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JURISDICTIONAL UTILITIES

April 27, 2006

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4 **Item 2)** Provide a general discussion of what you perceive to be the pros and cons  
5 with respect to low-income utility customers of implementing a smart metering standard  
6 in Kentucky.

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8 **Response)** The pros and cons of a smart metering standard are addressed in the  
9 respective responses of Big Rivers and its Member Systems to Smart Metering Item 4  
10 of the Commission's Initial Data Requests. These pros and cons apply to all  
11 customers, including low-income customers. For example, if customers respond to the  
12 information and price signals communicated through a smart metering program, such a  
13 program could reduce the need for or delay the need for construction of additional  
14 generating capacity as well as reduce or delay the associated generation and  
15 environmental costs. Additionally, a smart metering program has the potential for  
16 producing a more efficient utilization of electricity resources. These long-run  
17 efficiency gains, if they came to fruition, would accrue to all electricity consumers over  
18 time, including the low-income customers. However, the cost to implement a smart  
19 metering program, such as the cost of replacing current meters with smart meters,  
20 would likely have to either be borne by the customers participating in the program,  
21 which could be cost prohibitive to low-income customers participating in the program,  
22 or would have to be borne by all customers, including low-income customers, whether  
23 they participate in the program or not, and whether they benefit from the program or  
24 not. Additionally, some of the potential benefits of a smart metering program may not  
25 be available to low-income customers. One potential benefit of smart metering, if  
26 based on real-time two-way communication, is that service can be integrated with  
27 appliances such as smart thermostats. However, low-income customers are less likely  
28 to have such smart appliances, either because they are more likely to rent their home or  
29 because they are more likely to have older, less-efficient appliances. Simply put, low-  
30 income customers may encounter financial constraints in making the necessary  
31 improvements to appliances or may not be able to make the costly  
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April 27, 2006

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improvements in appliances necessary to take advantage of the time-based rate  
schedules or smart metering programs.

**Witness: C. William Blackburn and Russ Pogue**



RESPONSE OF BIG RIVERS ELECTRIC CORPORATION, KENERGY CORP.,  
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April 27, 2006

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**Item 3)** Please describe any anticipated barriers to participation in time-based rate  
schedules and/or smart metering programs low-income customers might face.

**Response)** See the response to Item 2, above.

**Witness:** C. William Blackburn and Russ Pogue



RESPONSE OF BIG RIVERS ELECTRIC CORPORATION, KENERGY CORP.,  
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April 27, 2006

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4 **Item 4)** Provide a description of any formal or informal analysis, discussion or  
5 study of the impact of any time based rate schedules and/or smart metering programs on  
6 low-income customers you have conducted or of which you are aware. Please describe  
7 any conclusions reached and provide copies of any documentation or results of such  
8 analysis, discussion or studies.  
9

10 **Response)** Big Rivers and its Member Systems are not aware of any formal or  
11 informal analysis, discussion or study of the impact of time-based rate schedules or  
12 smart metering on low-income customers.  
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16 **Witness: C. William Blackburn and Russ Pogue**  
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April 27, 2006

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4 **Item 5)** Would implementation of smart metering result in higher costs or rates to  
5 nonparticipating customers? Please describe any projected costs by category and amount,  
6 including any costs of installing, maintaining or reading new meters or other technology,  
7 and any systemic or program changes, such as software and billing changes, that you  
8 expect to be charged directly (or indirectly by higher rates) to nonparticipating customers.  
9

10 **Response)** In Big Rivers' response to Smart Metering Item 3 of the Commission's  
11 data requests dated February 24, 2006, these issues are discussed further. In order to  
12 get a better understanding of the costs, customer responses and benefits, Big Rivers and  
13 its Member Systems have suggested that a pilot or trial program may be necessary  
14 prior to any implementation of a more broadly based program.  
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16 **Witness: C. William Blackburn and Russ Pogue**  
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RESPONSE OF BIG RIVERS ELECTRIC CORPORATION, KENERGY CORP.,  
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**Item 6)** Describe in general the availability of the technology for smart meters,  
including:

- a. How many suppliers provide smart meters and related technology;
- b. The price range for smart meters.

**Response)** a. and b. See the response of Big Rivers and its Member Systems to  
Smart Metering Item 2 of the Commission's data requests dated February 24, 2006.

**Witness:** Russ Pogue and David Poe



RESPONSE OF BIG RIVERS ELECTRIC CORPORATION, KENERGY CORP.,  
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April 27, 2006

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4 **Item 7)** How accurate are the available smart meters? Have these meters been  
5 sufficiently tested for accuracy both prior to installation and in actual use?  
6

7 **Response)** Big Rivers, Kenergy and JPEC have not investigated the accuracy of  
8 smart meters. Meade County RECC is continuing with the implementation of the TS2  
9 system. Since this system relies on the current meters, there is no impact on accuracy.  
10 More generally, all meters would be tested to assure compliance with the  
11 Commission's regulation prior to installation.  
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14 **Big Rivers Witness:** C. William Blackburn and Russ Pogue

15 **Meade County Witness:** David Poe  
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April 27, 2006

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4 **Item 8)** How reliable are smart meters? Have any specific maintenance problems  
5 been identified?

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7 **Response)** Big Rivers, Kenergy and JPEC have not investigated the reliability of  
8 smart meters. Meade County RECC is continuing with the implementation of the TS2  
9 system. Since this system relies on the current meters, there is no impact on  
10 reliability. More generally, all meters would be tested to assure compliance with the  
11 Commission's regulation prior to installation.  
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14 **Big Rivers Witness:** C. William Blackburn and Russ Pogue

15 **Meade County Witness:** David Poe  
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RESPONSE OF BIG RIVERS ELECTRIC CORPORATION, KENERGY CORP.,  
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4 **Item 9)** Low income customers are often considered unable to lower energy use  
5 because of poor housing stock and/or use of older, inefficient appliances. Would you  
6 assist in enhancing or enlarging weatherization programs to help make smart meters an  
7 advantage to low-income customers?  
8

9 **Response)** It is premature to determine any particular initiatives that would  
10 accompany any smart metering program without knowing in more detail the particular  
11 implementation of such a program and the particular costs and benefits that would be  
12 associated with it. Big Rivers and its Member Systems make information available and  
13 provide other programs to enable their customers to increase and benefit from energy  
14 efficiency. See the response of Big Rivers and its Member Systems to Commission  
15 Staff's Second Information Request Item 5 for more detail on these programs.  
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18 **Witness: C. William Blackburn and Russ Pogue**  
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**Item 10)** If you implement time based rate schedules and/or smart metering, would you make any attempt to target any particular types of customers for participation?

**Response)** Because of little interest in such programs shown by the Member Systems' customers, Big Rivers and its Member Systems have made no attempt to target any particular type of customer for participation in time-based rate schedules or smart metering programs. This determination would likely be one of the objectives to be accomplished through a pilot or trial program.

**Witness: C. William Blackburn and Russ Pogue**